

Remarks/Arguments

Claims 1-38 are pending.

Claims 8-38 stand withdrawn.

Claims 1-5 and 7 stand rejected.

Claim 6 stands objected to.

Claim 1 has been amended.

New Claims 39-40 have been added by this amendment.

Restriction of Claims 8-38

Applicant notes that the Examiner has made the requirement to restrict between the invention of Group I, claims 1-7, and the inventions of Groups II-IX, corresponding to claims 8-38, final. Applicant previously elected Group I, with traverse. Claims 8-38 have been withdrawn. Accordingly, no action is believed to be required of Applicant at this time with respect to the restriction requirement.

35 USC 102 Rejections

Claims 1-2 stand rejected under 35 USC 102(e) as being anticipated by Petroski. Claims 1-2 and 7 stand rejected under 35 USC 102(e) as being anticipated by Galli (US 2004/013892). Claims 1-2 stand rejected under 35 USC 102(e) as being anticipated by Chapman (US 2004/0190286). Claim 1 having been amended, these rejections are respectfully traversed, as the cited prior art fails to disclose or suggest each of the features and limitations recited in present Claim 1.

The present invention is embodied in a handheld searchlight having a lamp for efficiently producing a high intensity beam of light comprising. The lamp that produces the high intensity beam of light is one of an arc lamp, incandescent lamp, and plasma lamp. The searchlight includes a printed circuit board having a first surface and a second surface opposite the first

surface, and including circuitry to regulate and control power supplied to the lamp; a housing to contain the printed circuit board; and a heat sink mounted onto a portion of the first surface of the circuit board. The heat sink is also coupled to the housing to dissipate heat generated by the printed circuit board.

The above is broadly encompassed by present claim 1, which recites

A handheld searchlight having a lamp for efficiently producing a high intensity beam of light comprising: a printed circuit board having a first surface and a second surface opposite said first surface, and including circuitry to regulate and control power supplied to the lamp; a housing to contain the printed circuit board; and a heat sink mounted onto a portion of said first surface of said circuit board, coupled to the printed circuit board, the heat sink also coupled to the housing to dissipate heat generated by the printed circuit board, wherein the lamp is one of an arc lamp, incandescent lamp, and plasma lamp. (emphasis added)

In contradistinction, the Petroski reference discloses an LED lighting system. Furthermore, as shown in FIGs. 1-3 of Petroski, and as described in the Petroski specification, printed circuit board (PCB) 26 has its surface entirely encompassed by a heat sink 20, which is cast as a one-piece casing of material and which includes various sleeve portions (20a, 20b).

Accordingly, Petroski fails to disclose or suggest each of the features and limitations as recited in present claim 1. Reconsideration and removal of this rejection is respectfully requested.

In similar fashion to that of Petroski, Chapman also discloses an LED flashlight system. Furthermore, a detailed reading of Chapman fails to reveal any disclosure or suggestion of a heat sink mounted onto a portion of said first surface of said circuit board, as required by present Claim 1. Rather, Chapman discloses on column 5, para. [0081]

Turning now to FIGS. 22-27, the LED holder 308 is similar to the switch housing 54 shown in FIGS. 6-9. However, the LED holder 308 is preferably made of a metal, e.g., aluminum, to better also act as a heat sink for use with higher power LEDs. The cylindrical body 330 of the holder 308 fits

within the front end of the switch housing tube 310, with the head or rim 332 acting to position the holder 308 within the switch housing tube 310. An LED slot 334 is formed between a base or land area 338 and overhanging tabs 336. Central LED lead openings 340 extend through the holder 308, for use with LEDs or lamps having straight leads. Side LED lead openings 341 are provided for use with LEDs having lateral leads. Accordingly, the holder 308 can be used with a large variety of LEDs or lamps. A switch pin opening 342 extends through the holder 308 to allow on/off switching of the microswitch 60, with twisting movement between the front and rear housings as described above. The base area 338 provides a flat and smooth surface for mounting a LED, and to better allow for heat flow from the LED into the holder 308. Thermal grease may be provided on the base area 338 to improve the heat flow path from the LED 306 into the holder 308, and ultimately to the front housing 16.

Furthermore, the drawings (e.g. FIGs. 22-27, 39-41) clearly reveal that printed circuit board 402 located on module 314 does not include a heat sink mounted onto a portion of the first surface of the circuit board. Accordingly, Chapman fails to disclose or suggest each of the features and limitations recited in present claim 1.

With regard to Galli, this reference likewise discloses an LED lighting assembly. For at least this reason, Galli fails to anticipate or render obvious the invention as recited in present Claim 1.

In view of the foregoing, reconsideration and removal of these 35 USC 102 rejections is respectfully requested. Claims 2-9 depend ultimately from allowable Claim 1 and are likewise allowable.

35 USC 103 Rejections


Claims 3 stands rejected under 35 USC 103(a) as being unpatentable over Petroski or Galli '892 or Chapman in view of Petroski. Claim 3 depends from amended Claim 1. Accordingly, this rejection is deemed moot. Reconsideration and withdrawal of this 35 USC 103 rejection is requested.

New claim 39 recites the additional limitation that the lamp is one of a mercury, xenon, metal halide, and halogen arc lamp. Support for this limitation may be found on page 10 of the application as originally filed. Newly added independent claim 40 recites subject matter contained in original claim 6 associated with sliding electrical contacts. Allowance of this claim is respectfully requested.

CONCLUSION

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited.

Respectfully submitted,



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